Customised mass production using inkjet technology

Inkjet printing combines the economic advantages of mass production with the trend towards customisation. Using digital data sets, both 2D and 3D surfaces can be coated – even with approved automotive paints or functional inks. Our process integration enables digital printing solutions at industrial-scale speeds and quality.

Industrial digital inkjet printing: the highlights

- High cost-effectiveness thanks to efficient process integration
- Chances in a matter of seconds
- Highly digitised process
- High precision
- Uniform surface coating
- Energy- and resource efficient



Industrial automation is the future.

fpt robotics makes it accessible.

As automation experts and a robotics manufacturer, we create solutions that enable you to achieve your goals in a future-proof way. Drawing on 45 years of experience, we cover the entire spectrum of process automation: from production, through intralogistics, to product finishing using digital printing.

fpt robotics is a brand of the FPT Robotik GmbH & Co. KG, FPT Project GmbH and the FPT Systems GmbH | Schattbucher Straße 10, 88279 Amtzell | ***www.fpt-robotics.de***



Industrial digital printing

future-proofed technology

fptrobotics

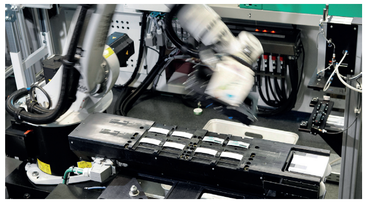
Future digital printing

Our digital printing solutions enables customised production at the cost of mass production - with 100 percent flexibility.



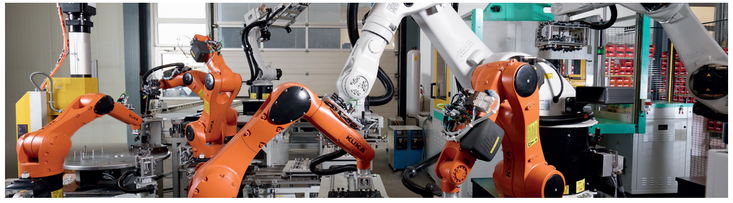
Feasibility studies and preliminary trials

In an ISO Class 7 cleanroom with a pre-treatment and pressurised chamber, a painting robot, a UV curing robot and a convection oven, as well as extensive testing equipment.



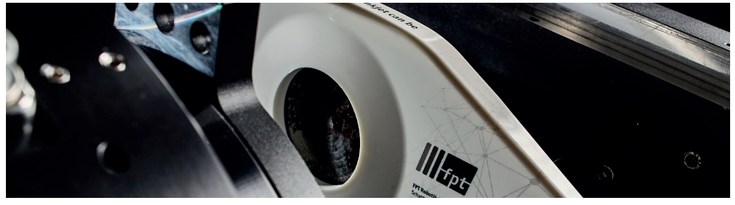
Customized inkjet printing systems

Design and construction of a printing system tailored to customer requirements in terms of ink, material, output and any other necessary process steps for product finishing.



Automation solutions combined with inkjet

A modular design that incorporates both preceding and subsequent process steps in inkjet finishing ensures maximum added value.



Inkjet printing on 3D surfaces

Using integrated software modules (such as those for path planning based on a digital twin or decor calculation based on geometry), 3D components can also be printed.

Flexibility

No need for semi-finished products or tools independence from geometry and volume; a digital process chain with rapid responsiveness and short distribution channels, „just-in-sequence“ finishing

Integration

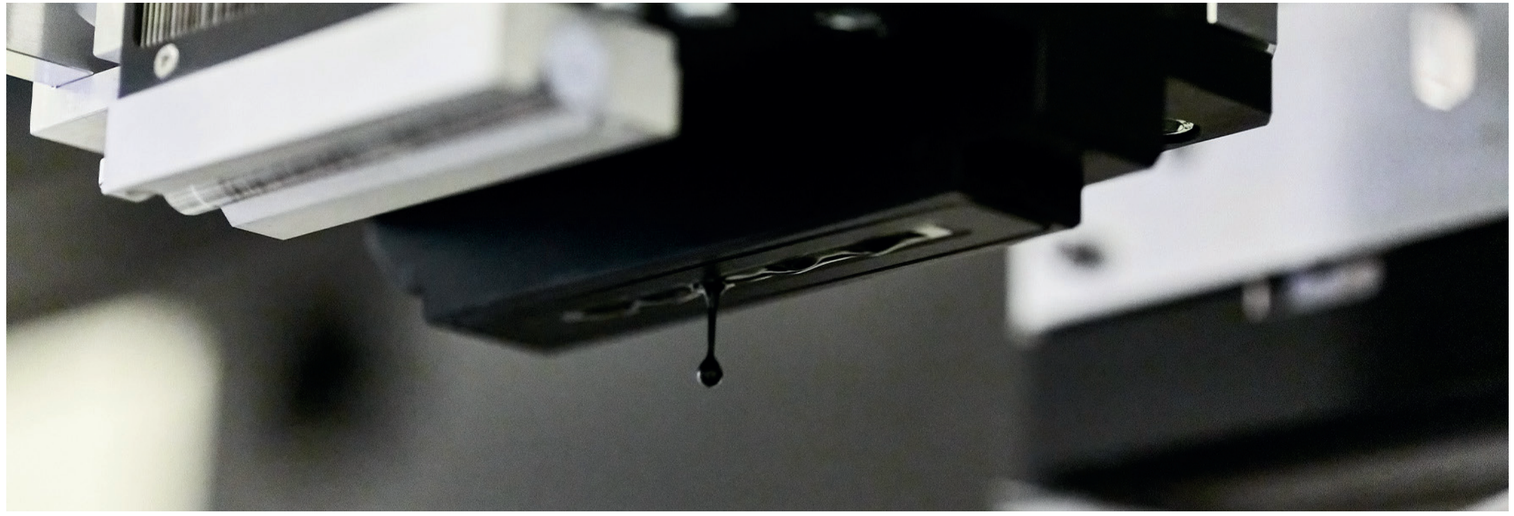
Precise and selective finishing without overspray, as well as the integration of the following finishing steps: primer, single- and multi-colour finishes, tactile finishes, coating as a post-treatment, functionalisation

Quality

Reduction in geometric constraints relating to edge areas reduction in scrap due to the elimination of flake formation and a short run-in period high precision due to improved edge sharpness

Sustainability

Elimination of transfer films (compared to in-mould labelling) and, consequently, less use of resources and film waste, reduction in the use of operating materials and chemicals, and upcycling of components



Digital coating

Using fpt inkjet technology, other materials such as functional inks and automotive-approved inks can also be applied. This offers significant added value compared with traditional spraying methods involving masking.